ORIGINAL

DOCKET FILE COPY ORIGINAL

RECEIVED

JUN 30 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Sections of	)	MM Docket 92-266
the Cable Television Consumer	)	MM Docket 93-215
Protection and Competition Act	)	
of 1992	)	
	)	
Rate Regulation	)	

REPLY OF BELL ATLANTIC[1]
ON PETITIONS FOR RECONSIDERATION

Rather than address the substantive issues raised by Bell Atlantic's petition,[2] the cable interests opposing reconsideration engage in a diversionary diatribe in an effort to preserve their regulatorily preferred status.

First, the cable commenters disparage Bell Atlantic for daring to breathe the word "parity," and claim that the Commission has firmly rejected parity of regulatory treatment for telephone and cable companies.[3] But the Commission itself recently found that, "as the cable and telephone industries

---

[1] The Bell Atlantic telephone companies are Bell Atlantic - Delaware, Inc., Bell Atlantic - District of Columbia, Inc., Bell Atlantic - Maryland, Inc, Bell Atlantic - New Jersey, Inc., Bell Atlantic - Pennsylvania, Inc., Bell Atlantic-Virginia, Inc., and Bell Atlantic - West Virginia, Inc.

[2] See Petition of Bell Atlantic for Further Reconsideration, MM Dkt Nos. 92-266 & 93-215 (May 16, 1994).

[3] See, e.g., Opposition of NCTA to the Petition of Bell Atlantic for Further Reconsideration at 2-3, 10 (June 16, 1994).

No. of Copies rec'd 0+10
List ABCDE

converge, it is important to treat them with as much regulatory parity as possible."[4] And while it is true that legitimate differences between cable and telephone companies should be taken into account, these commenters are unable to identify any difference that justifies a preferential price cap scheme for cable.[5]

Second, the cable commenters repeat their oft-rejected refrain that the Cable Act bars the Commission from applying any regulation to cable that also applies to telephone companies.[6] Their claim is based on a provision of the 1984 Cable Act which says only that cable should not be regulated "as a common carrier or utility by reason of providing any cable service."[7] But applying the same price cap rules to cable companies that apply to telephone companies would not subject them to common carriage obligations. Nor

---

[4] Implementation of Sections of the 1992 Cable Act - Rate Regulation, MM Dkt 92-266, 2d Order on Recon., 4th Report and Order, and 5th NPRM at ¶ 24 (rel. Mar. 30, 1994).

[5] Moreover, Dr. Robert Harris explains in the accompanying affidavit that the price cap schemes for cable and telephone companies must be comparable to avoid artificially handicapping one competitor over another, to the ultimate detriment of consumers. See Declaration of Robert G. Harris, MM Dkt 93-215 & CS Dkt 94-28 (June 30, 1994) (copy attached at tab 1). Although this affidavit was prepared in connection with a parallel proceeding, it is also relevant to the issues raised by the cable commenters here.

[6] NCTA Comments at 7-8.

[7] 47 U.S.C. § 541(c).

would it subject them to the types of obligations traditionally imposed on utilities -- such as universal service obligations or a requirement to provide a basic class of service at subsidized rates.

Moreover, cable companies no longer provide just "cable service," but also provide traditional telephone services. Cable companies have moved aggressively into the access business, often in combination with either foreign or domestic telephone companies such as Bell Canada, US West, or MCI.[8] In fact, cable companies now control over 50 percent of competitive access revenues,[9] and are expanding into the local exchange business.[10] In this respect, even the cable

---

[8] Bell Canada purchased 30% of Jones Intercable, and plans to "expand into wireline local exchange communications and broader telecommunications services." "Jones Intercable, Inc. and BCE Telecom Int'l Announce Strategic Relationship," Press Release, Dec. 2, 1993 at 2. US West invested $2.5 billion in Time Warner, and the two plan to upgrade Time Warner's cable systems to bypass LECs. Fabrikant, "US West Will Buy Into Time Warner," New York Times at A1 (May 17, 1993). And MCI, which is now 20% owned by British Telecom, has announced a joint experiment to test local phone service in Alexandria, Virginia and elsewhere with Jones Intercable. Dawson, F., "Jones Will Test Cable Telephony in Va., Chicago," Multichannel News at 3 (Nov. 29, 1993).

[9] Huber, P., The Enduring Myth Of The Local Bottleneck at 22 (Mar. 14, 1994).

[10] For example, Southwestern Bell has announced that it will provide ubiquitous local exchange service over its cable system in Montgomery County, Maryland, see Naik, G., "Southwestern Bell Plans Phone Service For Its Cable Customers In Sibling's Turf," Wall St. J., at 3 (May 23, 1994), while Time Warner has announced it will do so over its cable system in Rochester, New York, see "Time Warner Plans to Provide Switched Telephone Service in Rochester After Approvals Are Received," Time Warner Cable Corp. Affairs (May 16, 1994).

commenters do not dispute that they are common carriers subject to the full scope of Title II regulations.

Third, the cable commenters claim that the points covered by Bell Atlantic's petition have previously been raised and decided by the Commission.[11] This is so, the argument goes, because they were raised in an earlier reconsideration petition and not adopted.[12] But as Bell Atlantic has pointed out, these points were in fact raised but were not addressed[13] -- presumably as an oversight due to the flood of cable related work inundating the Commission at the time and the large number of issues to be dealt with.

Finally, one commenter argues that cable should not be subject to affiliate transaction rules akin to those that apply to telephone companies. While this is the subject of a parallel rulemaking proceeding,[14] the cable industry has argued that telephone companies should be subject to added rules as they move into video services.[15] Cable cannot have it both ways, and should be subject to the same rules as it

---

[11] See NCTA Comments at 4-5.

[12] Id.

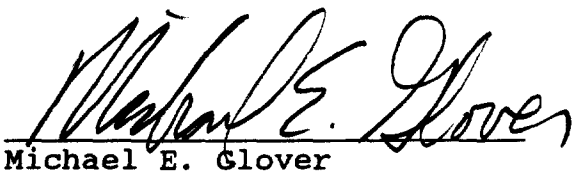
[13] Bell Atlantic Pet. at 1-2.

[14] Implementation of the Cable Act of 1992 - Rate Regulation, MM Dkt 93-215 and CS Dkt 94-28, Report and Order and FNPRM at ¶¶ 309-313 (Mar. 30, 1994).

[15] See Petition for Rulemaking of NCTA, et al., Amendment of the Commission's Rules to Establish and Implement Regulatory Procedures For Video Dialtone Service, RM 8221 (filed Apr. 8, 1993) (copy attached at tab 2).

moves into telephony that telephone companies are subject to as they move into video.

Respectfully submitted,



Michael E. Glover
1710 H Street, N.W.
Washington, D.C. 20006
(202) 392-1082

Attorney for the Bell Atlantic
Telephone Companies

Edward D. Young, III
Of Counsel

June 30, 1994

TAB 1

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington D.C.

In the matter of	)	
	)	
Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation	)	MM Docket No. 93-215
	)	
and	)	
	)	
Adoption of a Uniform Accounting System for Provision of Regulated Cable Service	)	CS Docket No. 94-28

DECLARATION OF ROBERT G. HARRIS

A. Qualifications

1. My name is Robert G. Harris. I am an Associate Professor in the Walter A. Haas School of Business, University of California, Berkeley. I earned Bachelor of Arts and Master of Arts degrees in Social Science from Michigan State University and Master of Arts and Doctor of Philosophy degrees in Economics from the University of California, Berkeley. At Berkeley, I teach undergraduate, MBA and PhD courses, including Business & Public Policy; Economics for Managerial Decisions; Antitrust and Economic Regulation; and Competitive Strategies and Public Policies in Telecommunications Industries. My academic research has analyzed the effects of economic regulation and antitrust policy on economic performance, and the implications of changing technologies and economics for public policies, especially in telecommunications and transportation. My curriculum vitae is Appendix 1 to this testimony.

2. While on leave from the University in 1980-81, I served as a Deputy Director for Cost, Economic and Financial Analysis of the Bureau of Accounts at the Interstate Commerce Commission. In that capacity, I supervised the work of approximately 90 staff accountants and analysts in rate and complaint case proceedings; was centrally involved in several major rule makings implementing the motor carrier and railroad regulatory reform acts of 1980, including the adoption of incremental and stand-alone costs for ratemaking; and directed the implementation of the revised Uniform System of Accounts and the development of the Uniform Rail Costing System. Since 1981, I have served as a consultant to the United States Department of Transportation, the United States General Accounting Office, the United States Office of Technology Assessment, the United States Department of Justice, the California Attorney General and the California Department of Consumer Affairs. I have also been a consultant to telecommunications and transportation companies regarding product pricing, new product development, regulatory policy and competitive strategy.

B. Purpose of Declaration

3. This declaration will respond to the Commission's invitation to comment on its proposed 2% productivity offset in the cable price cap formula. In addition to providing an economic analysis of the productivity offset factor, I will explain why, in this proceeding and in the review of local exchange carrier (LEC) price caps, it is crucially important that the Commission consider the implications of its regulation of one industry for the other. Section C addresses the need for comparable price cap rules and the implications of symmetrical treatment for setting the productivity offset factor for cable. It is critical that the offset be set on the same conceptual basis in both industries. Though these specific decisions will be made in separate proceedings, the Commission should ensure that its rules do not bias or distort the competitive balance between cable and LECs. By adopting

comparable regulations, it will contribute to healthy competition for investment capital, for innovation and new services, and for customers.

4. Section D will provide further evidence of existing competition between cable companies and LECs across an array of telecommunications services. It will also explain how, within the next few years, the degree of competition between LECs and cable will grow to major proportions as further "cross-entry" occurs: cable operators enter local exchange telephone services and LECs enter video program delivery through video dialtone. Growing competition between two industries, whether railroads and motor carriers or cable operators and LECs, increases the need for comparable regulation, because it increases the distortions and disincentives caused by regulatory differences or asymmetries.

5. The historic lesson from surface freight transportation is clear: as explained in Section E, the failure of the ICC to follow this principle caused enormous inefficiencies, competitive imbalances and economic dislocations. Customer choices between rail and motor carriage were driven not by the respective economics of the two modes of transportation, but by regulatory asymmetries that handicapped rail carriers from competing effectively with growing truck competition. Today, after fourteen years of reforms that both reduced regulation and restored balance, there is healthy competition -- and cooperation in intermodal services -- between the two industries. It is vital to the realization of the National Information Infrastructure that the Commission draws on the experience of the Interstate Commerce Commission by explicitly recognizing the need for comparable or corresponding regulatory treatment of cable and LECs.

C. The Need for Comparable Price Cap Regulation of LECs and Cable

6. The U.S. has a long history of regulating four major sectors of the economy: financial services, energy, transportation and telecommunications. Within each of these sectors, there are -- or were, due to regulatory distinctions -- several individual industries. In the financial sector, for example, we had separate and different regulatory policies for commercial banks, savings and loans, mutual banks and credit unions. Over time, the "industries" in each of these sectors became increasingly competitive, as banks competed with S&Ls, railroads with trucks, and electricity with natural gas. As "intermodal" competition increased, it became evident by the 1970's that separate and different regulations were causing economic distortions, dislocations and inefficiencies. In response -- delayed reaction would be a more accurate term -- legislators and regulators acted to remove obstacles to intermodal competition within these sectors and substantially reformed regulations toward each of the respective industries to promote balanced competition and create level playing fields. Unfortunately, by then, substantial economic harm had been caused by the failure to modify regulations in recognition of the growing competition among these industries.

7. One would hope we have learned an important lesson from those historical experiences: that the more directly two industries compete, the more important it is that regulations toward the two industries are comparable, corresponding or symmetrical. Companies in the two industries are, after all, competing in capital markets. Because investors are forward-looking and recognize the impact of regulations upon opportunities for growth and profitability, they specifically consider the respective regulations toward the two industries. What may seem to be small differences in regulatory treatment may substantially impact investors' valuations of the companies' prospects, and hence, their share prices, cost of capital and ability to attract investment. Regulations that limit new service offerings in one industry, while openly encouraging new services by the other, will

bias investors toward the latter. Regulations that limit the profits of one industry while allowing firms in the other industry to earn what they can based only on market performance will bias capital markets toward the latter.

8. Similarly, competition in outputs markets raises the costs of asymmetrical regulatory treatment. In the days when one industry has a monopoly over a given category of service, the price set by regulators may have caused customers to buy somewhat more or somewhat less, depending on the elasticity of demand. Now, though, when there is another provider of an equivalent or similar service, customers will readily switch from one supplier to another, based on the best combination of price and quality of service. If regulators set prices -- or establish price regulation regimes -- that cause price distortions in one industry relative to the other industry, they are biasing customers' choices, creating a competitive advantage for one industry and "handicapping" the other industry. Economic regulation is not a recreational sport: handicapping may be a good method of promoting competition in golf or bowling. In regulation, handicapping is a very bad idea, because it prevents investors and customers from making unbiased choices among competitive alternatives.

9. Both in terms of technology and in terms of services offered, the telephone and cable industries are rapidly converging. Though some differences may remain,[1] the industries are already competing in some markets and will soon be competing across the full range of telecommunications services. Because these industries are becoming head-to-head competitors, it is critically important to the performance of both industries that the

[1] One difference in regulatory treatment of LECs and cable operators is that, under the Commission's regulations, it is intended that rates for basic cable service be fully compensatory -- including a fair profit -- to the cable operator. In many states, by contrast, rates for basic telephone service do not recover economic costs, much less enable the LECs to earn a fair profit. Instead, regulated rate structures often impose higher prices on some LEC customers to subsidize the LECs' universal service obligation. By raising prices on those services, these subsidies are a major source of competitive disadvantage for LECs.

regulation of the cable and LECs be comparable or corresponding in certain fundamental respects. There are a number of areas in which the industries should be accorded comparable or corresponding treatment.

10. In determining the productivity offset factors for cable and LECs, the Commission should take a logically consistent approach toward both industries. It is especially important that the Commission not distort the price cap mechanisms by including an offset for LECs but excluding an offset from the cable price caps. There is no basis for such a distinction. Indeed, there are reasons why the Commission should adopt comparable productivity offsets for cable and LECs, one related to equity, the other based on economic efficiency. As to equity, it should be noted that the price cap regulation of cable rates relates to basic cable service, whereas LEC price caps limit access rates, which are reflected in long distance prices. Although cable service may not be a "utility" service in the classical sense, there is no basis for believing that basic cable service is any less essential to American consumers than long distance telephone service. Although just 60% of US households subscribe to cable service, that may reflect its high price, rather than households not wanting to subscribe. Indeed, that is the central rationale of the Cable Act and the Commission's regulation of basic cable service rates.[2] As to efficiency, both the cable and LEC price caps should reward efficiency-seeking behavior to the same degree: those firms that can exceed the historic industry norms should earn higher profits, while those who cannot, will not.

---

[2] "The average monthly cable rate has increased almost 3 times as much as the Consumer Price Index since rate deregulation." See Section 2(a)(1), Cable Television Consumer Protection and Competition Act of 1992, Pub. L.. 102 - 385, 106 Stat. 1460 (1992). " Without the pressure of another multichannel video programming distributor, a cable system faces no local competition. The result is undue market power for the cable operator as compared to that of consumers and video programmers." Id., Section 2(a)(2).

11. In both industries, the economically correct productivity offset in a price cap model is the expected rate of productivity gains in the future. The best indicator of future productivity gains is historical experience, over a sufficiently long period to reduce anomalous yearly fluctuations. This is the basis of the recommendation by the New Jersey Board of Regulatory Commissioners that the Commission adopt a 2% productivity offset for cable.[3] The Board noted that it "has recently adopted such an approach in the context of an economic regulation for a local exchange carrier." But in making its recommendation, the New Jersey Board also recognizes -- as should this Commission -- the need for comparable regulatory treatment of cable and LECs.

12. The New Jersey recommendation also makes economic sense because, given the growing convergence of both the technology and services offered between cable and LECs, one would expect the two industries to have similar rates of productivity growth. A recent review of productivity studies by NERA found that "the long-run productivity differential between the U.S. telephone industry and U.S. private business averages about 2 percent per year."[4] A recent empirical study of productivity by Christensen Associates found that "the TFP [Total Factor Productivity] growth differential between the LECs and the private business sector since divestiture has been 1.7 percent."[5]

---

[3] Staff Comments, New Jersey Board of Regulatory Commissioners, submitted in FCC MM Docket No. 92-266, January 26, 1993, p. 16.

[4] Economic Performance of the LEC Price Cap Plan, National Economic Research Associates, Inc. Attachment 5 to Comments of the United States Telephone Association to the Federal Communications Commission, In the Matter of Price Cap Performance Review for Local Exchange Carriers, CC Docket No. 94-1, p. 23.

[5] Productivity of the Local Operating Telephone Companies Subject to Price Cap Regulation, Christensen Associates. Attachment 6 to Comments of the United States Telephone Association to the Federal Communications Commission, In the Matter of Price Cap Performance Review for Local Exchange Carriers, CC Docket No. 94-1, p. 12.

13. In its Notice of Proposed Rulemaking, the Commission suggested that expected productivity gains in the cable industry might be lower than those achieved historically:

> "In the near term, however, the productivity that cable operators may reasonably be expected to achieve may differ from that of telephone companies, because of current differences in their networks, operations, services and histories. For example, local telephone companies have benefited from advances in computerized local switches, which are not in general use by cable systems."[6]

While factually correct, the inference drawn from the facts is incorrect. Because LECs have already installed digital switching and transmission, they have already realized the productivity benefits from adoption of digital technology. Because cable operators are just now deploying digital switching and transmission capabilities, they will be realizing the benefits during the price cap plan. Hence, as cable operators install optical fiber in trunks and digital switches, they should experience substantial gains in productivity over historic rates. In contrast, LECs have already largely deployed digital switches and optical fiber trunks, so there are fewer further productivity gains to be realized from these technologies by LECs. Second, whereas most expected cost increases are covered by the LEC price cap, a major category of costs is treated as exogenous for cable, namely the costs of program acquisition. Given these asymmetries, it is all the more important that the productivity offset be comparable for the two industries.

14. Just as the Commission is not contemplating a "stretch factor" or "consumer dividend" for cable rates, it should not incorporate these additives in its LEC offset factor. Moreover, LEC customers also continue to receive a "dividend" from the uneconomic depreciation rates of LECs, which lowered the initial access rates under the current price cap regime. As the "base rates" to which price cap changes will apply, consumers receive

---

[6] Report and Order and Further Notice of Proposed Rulemaking, MM Docket No. 93-215 and CS Docket No. 94-28, March 30, 1994, par. 319, p. 162.

this dividend into the indefinite future. In the cable price cap plan, in contrast, the initial rates reflect fully economic (i.e., higher) depreciation rates, whether implicit in the competitive benchmark rates, or explicit in the cost of service determination of initial rates. The inclusion of an additional consumer dividend in the price cap formula for LECs when none is included for cable would create a regulatory bias between the two industries.

15. The comparability of incentives is crucial to building the National Information Infrastructure. To ensure competition in the provisioning of interactive, broadband and other advanced telecommunications services, there should be at least "two wires to the home." LECs and cable operators are in a competitive race to upgrade their networks; both should be actively encouraged. The barriers to competition within and between the two modes should be eliminated, so long as that is done symmetrically and synchronously. The Commission could greatly bias the race, and severely distort the results, by lowering the barriers in one direction but not the other. Similarly, the rewards of winning the race should be comparable: by providing comparable economic incentives, both cable and LECs can be "medal winners," whether gold, silver or bronze. The two-wire strategy simply will not work otherwise.

D. Competition between Cable Companies and LECs

16. There is growing competition between cable operators and local exchange carriers. Cable operators are major players in the provision of competitive access services to end-users, interexchange carriers and wireless carriers. They are using their networks to provide backhaul of voice and data transmissions to cellular providers and competitive access providers (CAPs) are forming alliances to build and interconnect CAPs and cable networks. While more exhaustive descriptions are available elsewhere, a few examples of the various types of arrangements serve to make the point:

- Cox and TCI acquired Teleport Communications Group (TCG), the largest CAP, and sold minority stakes to the two other MSOs in 1993. The acquisition was completed with the intent of setting up ventures with local cable systems, which would hold stakes representative of their share of the market, leaving some portion of the business to the national Teleport venture.[7] Cox owns a 25.05% stake, followed by TCI with 24.95%, and Time Warner, Comcast, and Continental with 16.67% each.

- TCI, American Television and Communications (ATC) & TeleCable have participated in a joint venture known as FiberNet, since 1989 in and around Kansas City, Mo. The all-fiber network, covering close to 200 route miles on both sides of the Missouri River, now serves upwards of eight interexchange carriers, several airline reservation subsidiaries, financial brokerage houses and other large firms requiring diverse paths to carry their traffic.[8]

- PacTel Cellular Detroit has replaced some LEC-provided local loop circuits with leased cable TV fiber to connect to IXCs' facilities and uses fiber in combination with microwave for its network.[9]

- Continental Cable and Hyperion, a subsidiary of Adelphia, have set up a metropolitan area network through a joint venture in Jacksonville, Fla. The network utilizes Continental's existing fiber backbone and a series of fiber rings and fiber

---

[7] "Cable as the Alternative," *Cablevision*, March 22, 1993.

[8] "In Teleport's Shadow," *Cablevision*, September 21, 1992.

[9] Peter Huber, "The Enduring Myth of the Local Bottleneck," 1994, p. 39.

hookups to the premises of potential users. Between 30 and 40 large business users have been identified as likely connection points for the operation.[10]

- Continental Cable and Teleport began building loops around greater Boston and in the Wilshire corridor of Los Angeles through a joint venture since 1992. TCG has been able to extend its business beyond the city limits via fiber routes available over Continental's suburban systems, allowing the MSO to enter the business without devoting a tremendous amount of startup effort.[11]

- Comcast agreed to acquire a 51% stake in Eastern TeleLogic in July, 1992 and subsequently expanded the CAP's operations in Philadelphia.[12]

- Continental, Adelphia Communications and Maclean Hunter Cable Television and Comcast concluded a deal in 1992 to establish a CAP network in Palm Beach County, Florida.[13]

17. Cable operators are now beginning to upgrade their existing networks to provide a broad range of telecommunications services. Cable companies are beginning to provide telephony services directly over their cable networks, often through alliances with other telecommunications companies. These "intermodal" alliances provide cable companies with significant financial backing and the technological know-how concerning the provision of two-way telephony and will thereby accelerate entry by cable companies into a wide range of exchange and interexchange telecommunications services. For example:

---

[10] "In Teleport's Shadow," p.31.

[11] "In Teleport's Shadow," p.31.

[12] "In Teleport's Shadow," p.31.

[13] "In Teleport's Shadow," p.31.

- US West bought a 25% stake in the Time-Warner Entertainment for $2.5 billion in December of 1993. Roughly $1 billion of US West's investment was targeted to accelerate the building of full-service networks on Time Warner Cable systems in 25 major metropolitan areas. The two companies, with combined sales of over $32 billion,[14] will share in the design, implementation, and direction of the full-service networks, which will accommodate a wide range of services including telephony. Time Warner has announced plans to offer telephony services in Rochester, New York.[15]

- MCI recently announced a joint trial with Jones Intercable to test phone service over the Jones cable network in Alexandria, Virginia.[16]

- In February 1993, Southwestern Bell purchased Hauser Cable and has petitioned the Maryland Commission for authority to provide exchange telephone services.[17] This acquisition makes it possible for Southwestern Bell to gain access to Bell Atlantic local service customers through the cable companies' facilities. The Arlington County and Montgomery franchises serve over 200,000 households. The newly-named SBC Media Ventures has filed an application to the Maryland Public Service Commission for authority to provide local exchange telephone service in Montgomery County.[18]

---

[14] "US West's Deficit Spending," *Cablevision*, February 28, 1994, & Edge, May 24, 1993.

[15] Quittner, Joshua, "Cable's Vision", *Newsday*, February 25, 1993, pp. 3.

[16] See "Reaching their Potential," *Cablevision*, January 11, 1993, p. 33.

[17] "Southwestern Bell: Cable's Next Powerhouse?," *Cablevision*, May 10, 1993.

[18] "Application of SBC Media Ventures, Inc. For Authority to Provide Local Exchange Telecommunications Services," before the Public Service Commission of Maryland, May 20, 1994.

- Cablevision (in conjunction with AT&T) won a competitive bid over Nynex to provide local telephone and cable services to Long Island University's C.W. Post campuses. In addition, Cablevision has constructed on Long Island the fiber backbone of a high-speed communications network linking Stony Brook University and Brookhaven National Laboratory, termed FISHNet, using an ATM technology that allows voice, video and data images to be processed together.[19]

18. Cable companies are also actively involved in the development of PCS technologies. It is apparent that they will be competing directly with LECs and others in PCS. For example, Comcast is conducting trials in five cities, Hauser Communications is testing in five cities, Prime II in six cities, Time Warner in five cities, United Artists Cable in five cities, Viacom in five cities, Cable USA in four cities, and Cablevision in four cities. Cable companies hold over 10% of the 187 experimental PCS licenses issued by the FCC.[20] Continental Cablevision, Cablevision of Boston, and Time Warner became the first cable TV companies to interconnect their systems to demonstrate how PCS could be offered over CATV systems in late 1993. The demonstration showed that the cable companies had to do very little to their basic cable infrastructure to offer wireless services and bypass the local telephone company for cell site interconnection.[21]

19. Based on recent technological developments and corporate announcements by both cable companies and LECs, the competition between the two industries will only intensify over the next few years. As cable companies digitize and fiberize their coaxial

---

[19] See "Cablevision Seeks to Catch Big Fish in its High-Speed Long Island Net," *Communications Engineering and Design*, April 1994, p. 8 and "Information Superhighway Adds Lane," *Currents*, April 1994, p. 1.

[20] *Communications Daily*, November 18, 1993.

[21] "CATV networks join to offer PCS," *Telephony*, November 22, 1993, p.8.

networks, they will be expanding rapidly into two-way, interactive telecommunications services. As LECs upgrade or replace their existing copper twisted-pair distribution facilities with fiber and/or coaxial cables, they will be offering video programming distribution and other broadband services under the Commission "video dialtone" provisions. Indeed, the Commission has already found that, "by providing the distribution system that makes video programming 'available for purchase' by subscribers and customers, we conclude that video dialtone comes within the plain language of th[e effective competition] section of the [Cable] Act."[22]

E. The Failure of Asymmetric Regulation of Competitive Industries

20. In the late 1970's and early 1980's, I was substantially involved in the transformation of transportation regulatory policies in the United States. My research on surface freight transportation was influential in the rationalization of the U.S. railroad industry and the adoption of progressive regulatory policies by the U.S. Congress and the Interstate Commerce Commission.[23] As an advisor to the U.S. Department of

---

[22] Report and Order and Further Notice of Proposed Rulemaking, MM Docket 92-266, May 3, 1994, par. 20, p. 5650.

[23] See, for example, the following articles and papers by Robert G. Harris, all of which addressed the benefits of rationalizing the rail freight industry and public policies toward the industry:

"Revitalization of the U.S. Freight Industry: An Organizational Perspective," International Railway Economics, edited by K. Button & D. Pitfield; Crower, London: 1985 (with Curtis M. Grimm).

"Structural Economics of the U.S. Rail Freight Industry: Concepts, Evidence and Merger Policy Implications," Transportation Research, 17A(4), July 1983 (with Curtis M. Grimm).

"Potential Benefits of Rail Mergers: An Econometric Analysis of Network Effects on Service Quality," Review of Economics and Statistics, 65(1), February 1983 (with Clifford Winston).

Rationalizing the Rail Freight System: Costs and Benefits of Branch Line Abandonments. U.S. Department of Transportation, Washington, D.C.: 1981.

"Determinants of Railroad Profitability: An Econometric Study," Economic Regulation: Essays in Honor of James R. Nelson, William G. Shepherd and Kenneth D. Boyer (eds.); Michigan State University Press, 1981 (with Theodore E. Keeler).

Transportation on transportation legislation and a Deputy Director at the Interstate Commerce Commission, I played a leadership role in implementing the railroad and motor carrier regulatory reform acts passed by Congress in 1980. There are significant parallels between the policy changes in transportation then and the recent and pending policy changes in telecommunications now. In both cases, after several decades of stable regulatory policies that relied heavily on administrative controls, the nation opted to pursue a different course: the development and implementation of regulatory policies that promote competition and speed the transition from a heavily regulated environment to a less regulated competitive environment.

21. The record of the success of surface freight transportation under reformed regulatory policies came, unfortunately, much too late. Indeed, it was the drastic failures of asymmetric, non-adaptive regulatory policies which generated the force for finally changing policies in the late 1970's and early 1980's.[24] By the 1970's, the US railroad industry was in financial and physical ruin. Approximately half of the rail mileage was owned by carriers in bankruptcy. In addition to billions of dollars in Federal subsidies to protect essential rail services and bail out bankrupt carriers, there was an enormous negative effect on workers, communities and investors, due to the long-term decline of rail service. The impact on the regional economies of the Northeast and the Midwest was especially devastating.

"Rationalizing the Physical Structure of the U.S. Rail Freight Industry," National Railroad Policy, Joint Economic Committee, U.S. Congress. Washington, D.C.: Government Printing Office, 1979.

[24] The watershed year in the reform process was 1980, with the passage of the Staggers Act, which liberalized railroad regulation, and the Motor Carrier Act. The impetus for change came from President Jimmy Carter, who appointed Dr. Darius Gaskins, a professor of economics at the University of California, Berkeley, as Chair of the Interstate Commerce Commission. Even as Congress deliberated over the reform legislation, Chairman Gaskins immediately moved to modify Commission policies within the limits of the then existing statutes.

22. While many observers cited the "natural decline" of railroads as a competitively viable industry, unable to compete with motor carriers, water carriers and pipelines, the current health of the rail freight industry belies that explanation. The decline was caused by obsolete regulatory policies, thanks in no small part to the major competitors of railroads, the trucking industry.[25] In one proceeding after another, motor carriers argued strenuously that railroads should be prevented from responding to truck competitors, because that would harm competitors. Truckers argued that rail carriers should price at or above "fully distributed costs," even though railroad's incremental costs on traffic they were losing to trucks was far lower.[26]

23. The Interstate Commerce Commission was, frankly, blinded by an anachronistic view of the railroads as "monopolies," eager and able to destroy their highway competitors unless regulators stood vigilant by preventing rail carriers from pricing their services economically and by inhibiting the development of new rail services. In reality, the trucking companies, rapidly stole the most profitable, high valued traffic, leaving the railroads to serve unprofitable customers and low density rural areas. Regulators failed to allow railroads pricing flexibility in response to growing competition from motor carriers, yet forced railroads to continue subsidies to agricultural shippers and rural areas with no source of support.[27]

---

[25] The ICC's decisions were compounded by differential legislative treatment, which exempted private motor carriage, contract motor carriage, and agricultural commodities from Federal regulation. With the artificial competitive advantage gained from rail rates set by the ICC to cover fully distributed costs, motor carriers took huge amounts of traffic from rail carriers even though their economic costs were higher. .See Keeler, pp. 28-29

[26] Keeler, T.D., Railroads, Freight, and Public Policy Brookings, Washington, D.C., 1983, pp. 28-29 discusses this policy. Evidence that rail costs are substantially lower than truck costs for many commodities is provided by Keeler (same cite) p. 76. Moreover, using short-run variable costs provides even lower estimates of rail costs. The formula designed by the Interstate Commerce Commission produces cost variability in the 50 to 60 percent range.

[27] Since the Smith Act of 1926, the Commission enforced low rail rates for agricultural commodities, subsidized - in theory - by high rates on high value commodities. Commission policy also made it extremely difficult, and, hence, extremely rare, for a rail carrier

24. After a decade or more of physical decline and financial strife, the Congress and the Interstate Commerce Commission finally responded to the changed economic conditions and competitive realities. Those regulatory reforms have revitalized the rail industry, brought down rail rates in real terms,[28] restored the industry's financial health, induced substantial investment in network upgrades, stimulated rapid technological innovation and deployment, and shifted large volumes of truck traffic off the highways and on to far more efficient intermodal trains.[29] Shipper surveys reveal that most customers are delighted with their newfound freedom to bargain, negotiate and contract for services, and with the significant and continuing improvements in rail service quality.[30]

---

to abandon low density branch lines, no matter how much money it was losing on the service. See Robert G. Harris, "Economic Analysis of Light Density Rail Lines," The Logistics and Transportation Review, 16(1), Winter 1980.

[28] Most importantly, the regulatory reforms of 1980 effectively deregulated rail rates wherever the railroad does not have "market dominance." Having finally been freed from onerous regulations, rail carriers have won back a substantial share of the traffic that they never should have lost to motor carriers in the first place, had regulation allowed fair competition. Today, the fastest growing class of rail service is intermodal -- trailers and containers moving on the line-haul portion by rail, with local pickup and delivery by truck. The shift to intermodal has dramatically reduced transportation costs to shippers, and also reduced energy consumption and highway congestion. See Mitchell E. MacDonald, "Rails Climb Back into the Ring," TRAFFIC MANAGEMENT, December 1993, p. 43.

[29] See Clifford Winston, Thomas M. Corsi, Curtis M. Grimm, and Carol A. Evans, The Economic Effects of Surface Freight Deregulation Brookings, Washington, D.C., 1990. These authors have conducted the most comprehensive study of the effects of both rail and truck deregulation, employing a counterfactual methodology. According to this source, the railroads reaped cost savings of over $3 billion dollars due to deregulation (pp. 15-41).

From 1971-1980, railroad return on equity averaged less than 3%. By 1979, almost one-fourth of Class I rail mileage was in bankruptcy. Since passage of the Staggers Act, not one major railroad has gone bankrupt and the financial condition of the industry has improved dramatically. See MacDonald, pp. 40-41.

In addition, according to the Interstate Commerce Commission, ROE for Class I railroads in 1993 was 9.38%. See "Class I Railroad Financial Data," ICC, Office of Economic and Environmental Analysis, May 1994.

[30] See Curtis M. Grimm and Ken G. Smith "The Impact of Rail Regulatory Reform on Rates, Service Quality, and Management Performance: A Shipper Perspective," LOGISTICS AND TRANSPORTATION REVIEW vol. 22, No. 1, 1986, pp. 57-68. Shippers rated rail rates and service quality in terms of speed of service, reliability, loss and damage and car supply significantly higher in the Post-Staggers period as compared to Pre-Staggers. Also, according to the Winston, et al study cited above, p. 28, shippers have received economic benefits from rail deregulation of more than $6 billion dollars annually (1988 dollars), driven by improvement in service quality.

22. While many observers cited the "natural decline" of railroads as a competitively viable industry, unable to compete with motor carriers, water carriers and pipelines, the current health of the rail freight industry belies that explanation. The decline was caused by obsolete regulatory policies, thanks in no small part to the major competitors of railroads, the trucking industry.[25] In one proceeding after another, motor carriers argued strenuously that railroads should be prevented from responding to truck competitors, because that would harm competitors. Truckers argued that rail carriers should price at or above "fully distributed costs," even though railroad's incremental costs on traffic they were losing to trucks was far lower.[26]

23. The Interstate Commerce Commission was, frankly, blinded by an anachronistic view of the railroads as "monopolies," eager and able to destroy their highway competitors unless regulators stood vigilant by preventing rail carriers from pricing their services economically and by inhibiting the development of new rail services. In reality, the trucking companies, rapidly stole the most profitable, high valued traffic, leaving the railroads to serve unprofitable customers and low density rural areas. Regulators failed to allow railroads pricing flexibility in response to growing competition from motor carriers, yet forced railroads to continue subsidies to agricultural shippers and rural areas with no source of support.[27]

---

[25] The ICC's decisions were compounded by differential legislative treatment, which exempted private motor carriage, contract motor carriage, and agricultural commodities from Federal regulation. With the artificial competitive advantage gained from rail rates set by the ICC to cover fully distributed costs, motor carriers took huge amounts of traffic from rail carriers even though their economic costs were higher. .See Keeler, pp. 28-29

[26] Keeler, T.D., Railroads, Freight, and Public Policy Brookings, Washington, D.C., 1983, pp. 28-29 discusses this policy. Evidence that rail costs are substantially lower than truck costs for many commodities is provided by Keeler (same cite) p. 76. Moreover, using short-run variable costs provides even lower estimates of rail costs. The formula designed by the Interstate Commerce Commission produces cost variability in the 50 to 60 percent range.

[27] Since the Smith Act of 1926, the Commission enforced low rail rates for agricultural commodities, subsidized - in theory - by high rates on high value commodities. Commission policy also made it extremely difficult, and, hence, extremely rare, for a rail carrier